

U.S. Patent Application Serial No. 10/084,924  
Amendment Under 37 C.F.R. §1.111 dated August 19, 2003  
Reply to Office Action of June 17, 2003

### **REMARKS**

Claims 1 - 21 are pending in the application, of which claims 3 and 6 - 21 have been withdrawn from consideration. By this Amendment, claim 1 has been amended. The applicants respectfully submit that no new matter has been added. It is believed that this Amendment is fully responsive to the Office Action dated **June 17, 2003**.

### **As to the Merits**

As to the merits of this case, the Examiner maintains the following prior art rejections:

- 1) claims 1 and 2 stand rejected under 35 U.S.C. §102(b) as being anticipated by Sasaki et al. (U.S. Patent No. 6,180,528); and
- 2) claim 4 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Sasaki et al. in view of Tokue (Japanese Patent Publication No. 402142143 A).

Each of these rejections are respectfully traversed.

Claim 1 has been currently amended to clarify that the head of the mushroom gate is separated from the upper surface of the first insulating film, and the stem rides on the first insulating film at least on one end.

U.S. Patent Application Serial No. 10/084,924  
Amendment Under 37 C.F.R. §1.111 dated August 19, 2003  
Reply to Office Action of June 17, 2003

With regard to the prior art rejections, the Examiner's continues to rely on the Sasaki et al. reference even though during the April 1, 2003 Personal Interview, the Examiner indicated in the corresponding Interview Summary Record that "[I]t was agreed upon that the proposed amendments overcomes the prior art identified above" referring to Sasaki et al.

Further, in the present Office Action, the Examiner merely reiterates verbatim the previous reliance of Sasaki et al. set forth in page 4 of the previous Office Action dated January 2, 2003, without providing any type rebuttal to Applicants' arguments present in either the Personal Interview or as stipulated in the Amendment dated April 2, 2003.

That is, the Examiner completely fails to address Applicants' position that Sasaki et al. fail to disclose the features of claim 1, as amended, concerning *the head having a size expanded stepwise along the current direction at a level above and separated from said upper surface of said first insulating film, and the stem contacting said semiconductor substrate in the gate electrode opening and riding on said upper surface of said first insulating film at least one of opposite ends of the stem along the current direction.*

More specifically, the Examiner does not provide any rebuttal position or argument concerning the fact that the stem of the gate electrode 8, illustrated in Fig. 3E of Sasaki et al.,

U.S. Patent Application Serial No. 10/084,924  
Amendment Under 37 C.F.R. §1.111 dated August 19, 2003  
Reply to Office Action of June 17, 2003

clearly does not ride on the upper surface of the first insulating film, as called for in claim 1.

Instead, the stem of the gate electrode 8 rides on the substrate 1.

Further, the Examiner fails to provide any rebuttal regarding Applicants' position that the head of the gate electrode 8, illustrated in Fig. 3E of Sasaki, clearly is not at a level above and separated from an upper surface of the insulating film 13, as called for in claim 1.

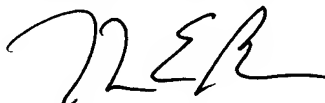
As such, Applicants' demand that the Examiner afford proper consideration to the arguments regarding Sasaki et al. set forth in this response.

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact Applicant's undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed, Applicant respectfully petitions for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,

ARMSTRONG, WESTERMAN & HATTORI, LLP



Thomas E. Brown  
Attorney for Applicant  
Reg. No. 44,450

TEB/kal  
Atty. Docket No. **020212**  
Suite 1000  
1725 K Street, N.W.  
Washington, D.C. 20006  
(202) 659-2930

Customer Number  
**23850**  
PATENT TRADEMARK OFFICE